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Comparison of MetAP2 Homologues (mouse = SEQ ID NO:12; human = SEQ ID NO:13; rat = SEQ ID NO:17; yeast = SEQ ID NO:14)

	1	15 16	30 31	45 46	60 61	75 76	90
mouse	MAGVEQAASFGGHILN	GDLDPDDREEGTSST	AAAACKRRKKKG	KGAVSAVQELDKES	GALVDEVAKQLESQA	LEEKERDDDEDGG	90
rat	MAGVEEASSFGGHILN	RDLDPDDREEGTSST	AAAACKRRKKKG	KGAVSAGQELDKES	GTSVDEVAKQLEERA	LEEKERDDDEDGG	90
human	MAGVEEVAASGSHLN	GDLDPDDREEGAAT	AAAACKRRKKKG	KGPSAAGEQEPDKES	GSVDEVARQLESA	LEDKERDEDDEDGG	90
yeast	-----	-----	-----	-----	-----	-----	38
	91	105 106	120 121	135 136	150 151	165 166	180
mouse	DADGATGKKKKKKK	KRGPKVQTDPPSVPI	CDLYPNGVFPKGQEC	EPPTQDGRTAWRT	TSEEKKALDQASEEI	WNDFREAAEHRQVR	180
rat	DGDGAAGKKKKKKK	KRGPKVQTDPPSVPI	CDLYPNGVFPKGQEC	EPPTQDGRTAWRT	TSEEKKALDQASEEI	WNDFREAAEHRQVR	180
human	DGDGATGKKKKKKK	KRGPKVQTDPPSVPI	CDLYPNGVFPKGQEC	EPPTQDGRTAWRT	TSEEKKALDQASEEI	WNDFREAAEHRQVR	180
yeast	ESKKKKKKKKKKK	N-----VKI	ELLFPDGKYPEGAWM	DYHQDFNLQRTDEE	SRVLRDLERA--EH	WNDRVKGAEIHRVR	116
	181	195 196	210 211	225 226	240 241	255 256	270
mouse	KVVMWSWIKGPMTMIE	ICEKLEDCSRKLIKE	NGLNAG-----LA	FPTGCSLNNAHHT	PNAGDTTVLQYDDIC	KIDFGTHISGRIIDC	263
rat	KVVMWSWIKGPMTMIE	ICEKLEDCSRKLIKE	NGLNAG-----LA	FPTGCSLNNAHHT	PNAGDTTVLQYDDIC	KIDFGTHISGRIIDC	263
human	KVVMWSWIKGPMTMIE	ICEKLEDCSRKLIKE	NGLNAG-----LA	FPTGCSLNNAHHT	PNAGDTTVLQYDDIC	KIDFGTHISGRIIDC	263
yeast	RAIKDRIVPGMKLMD	IADMINTTRKYGA	ENLIAMEDPKSQGIG	FPTGILSLNHCAHFT	PNAGDTTVLQYDDM	KVDYGVQVNGNIIDS	206
	271	285 286	300 301	315 316	330 331	345 346	360
mouse	AFTVTENPKYDILLT	AVKDATNTGIKCAGI	DVRICDVGEAIQEVW	ESYEVEIDGKTYQVK	PIRNLNHGHSIGPYRI	HAGKTVPTVKGEAT	353
rat	AFTVTENPKYDILLK	AVKDATNTGIKCAGI	DVRICDVGEAIQEVW	ESYEVEIDGKTYQVK	PIRNLNHGHSIGPYRI	HAGKTVPTVKGEAT	353
human	AFTVTENPKYDILLK	AVKDATNTGIKCAGI	DVRICDVGEAIQEVW	ESYEVEIDGKTYQVK	PIRNLNHGHSIGPYRI	HAGKTVPTVKGEAT	353
yeast	AFTVSTFDQYDNLLA	AVKDATNTGIKCAGI	DVRICDVGEAIQEVW	ESYEVEIDGKTYQVK	PIRNLNHGHSIGPYRI	HAGKTVPTVKGEAT	353
	361	375 376	390 391	405 406	420 421	435 436	450
mouse	RMEEGEYVAIETFGS	TGKGVVHDDMECSHY	MKNFDVGHVPIRLPR	TKHLLNVINENFGTL	AFCCRWLDRLGESKY	IMALKNLCDLGIVDP	443
rat	RMEEGEYVAIETFGS	TGKGVVHDDMECSHY	MKNFDVGHVPIRLPR	TKHLLNVINENFGTL	AFCCRWLDRLGESKY	IMALKNLCDLGIVDP	443
human	RMEEGEYVAIETFGS	TGKGVVHDDMECSHY	MKNFDVGHVPIRLPR	TKHLLNVINENFGTL	AFCCRWLDRLGESKY	IMALKNLCDLGIVDP	443
yeast	KMEEGEHFAETETFGS	TGKGVVHDDMECSHY	ARSAEDHQVMPTLDS	AKNLKTIDRNFGTL	PFCCRRLDRLGQEKY	LFALNNLVRHGLVQD	386
	451	465 466	480				
mouse	YPLLCDIKGSYTAQF	EHTILLRPTCKEVVS	RGDDY--	478			
rat	YPLLCDIKGSYTAQF	EHTILCAQPVKLSA	EEMTIKT	480			
human	YPLLCDIKGSYTAQF	EHTILLRPTCKEVVS	RGDDY--	478			
yeast	YPLNDIPGSYTAQF	EHTILLHAKKEVVS	KGDDY--	421			

Title: Dominant Negative Variants of Methionine Aminopeptidase 2  
 Inventor(s): Chang et al.  
 Appln. No. 10/712,359  
 Docket # 66153/45004

Figure 1



## MetAP2

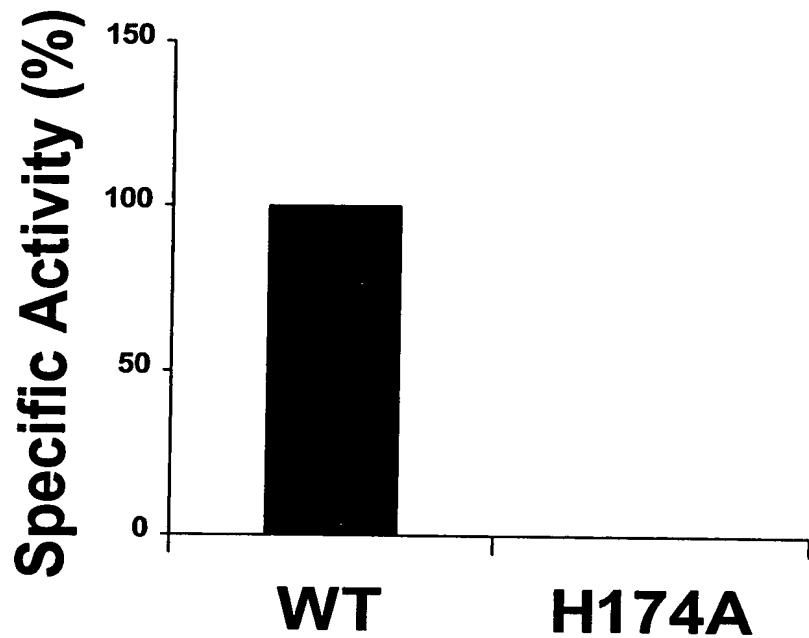
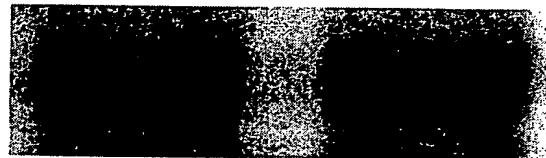
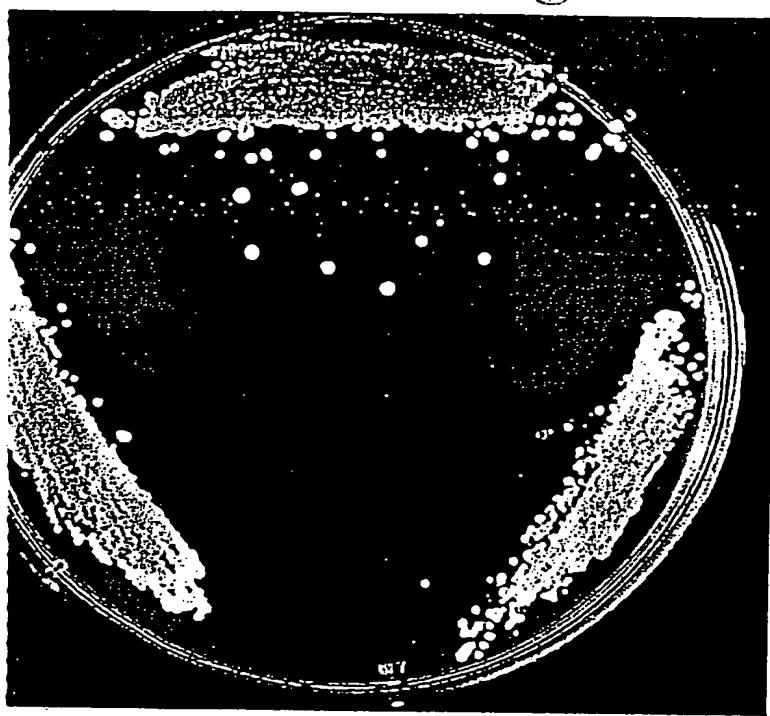
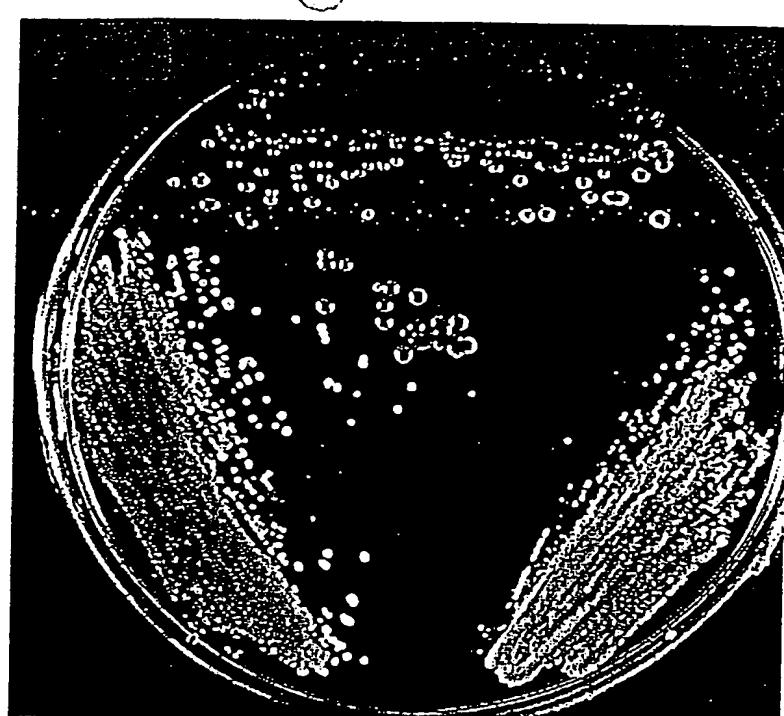


Figure 2

Title: Dominant Negative Variants of Methionine Aminopeptidase 2  
Inventor(s): Chang et al.  
Appln. No. 10/712,359  
Docket # 66153/45004



A. Glucose



B. Galactose

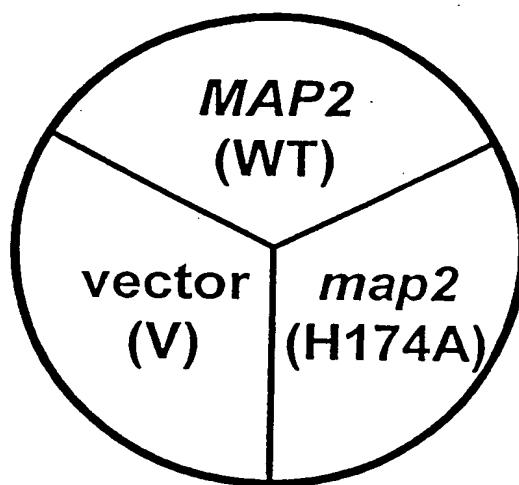


FIGURE 3

Title:

Dominant Negative Variants of Methionine Aminopeptidase 2

Inventor(s):

Chang et al.

Appln. No.

10/712,359

Docket #

66153/45004

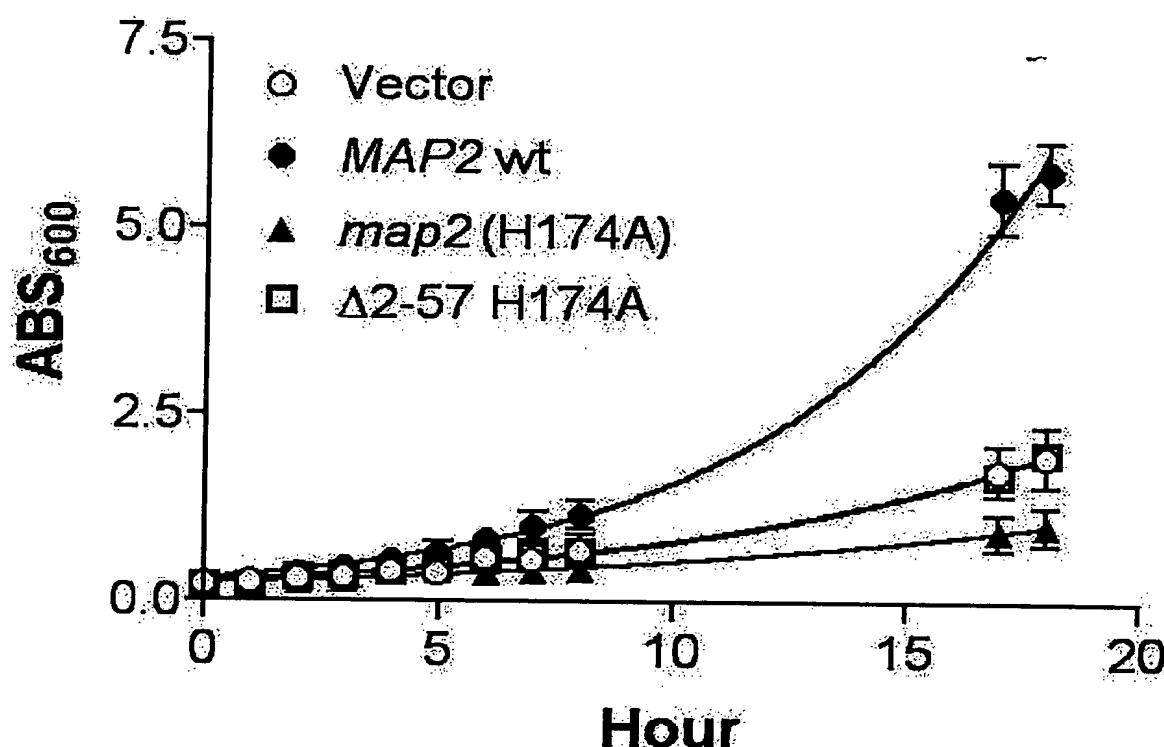
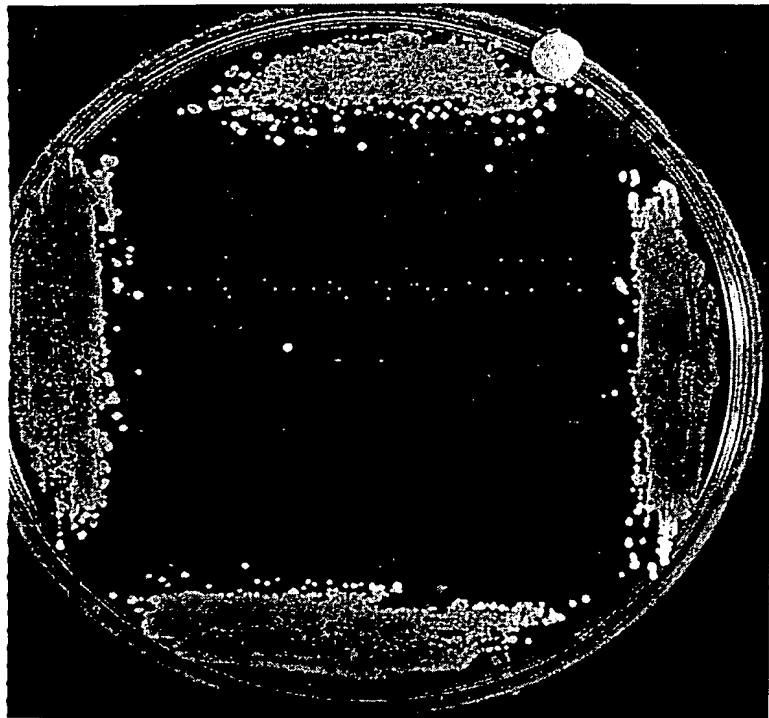
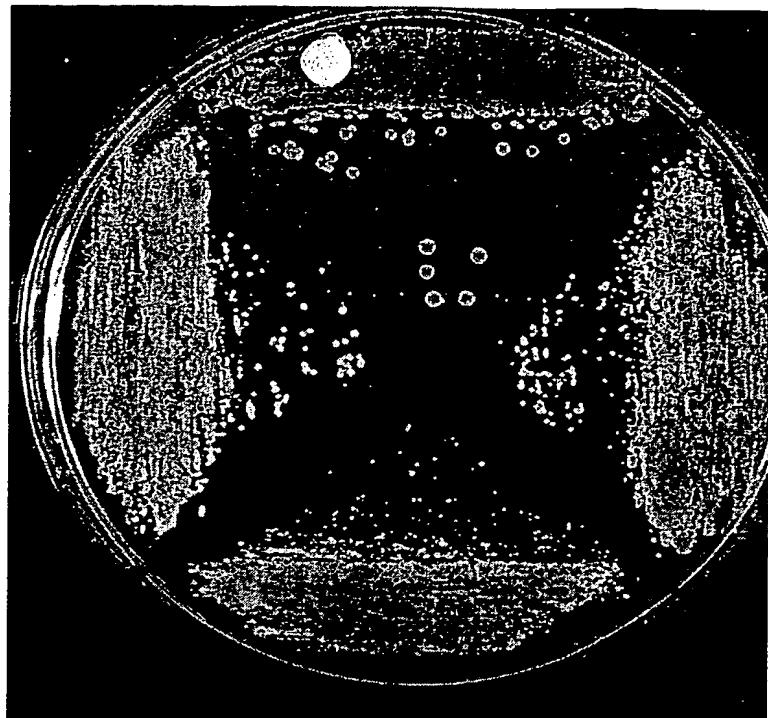


Figure 4

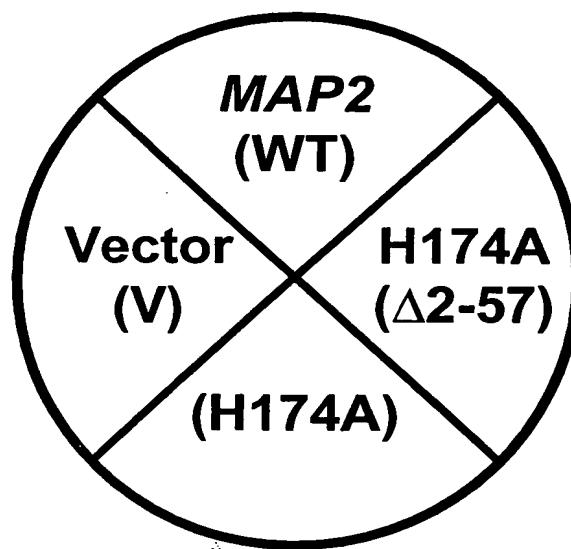
Title: Dominant Negative Variants of Methionine Aminopeptidase 2  
Inventor(s): Chang et al.  
Appln. No. 10/712,359  
Docket # 66153/45004



**A. Glucose**



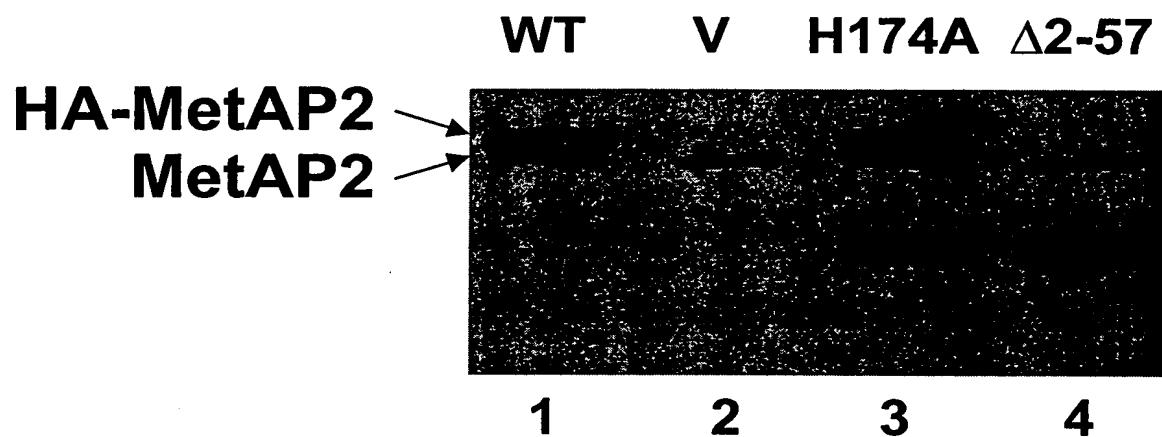
**B. Galactose**



H174A-MetAP2 requires N-terminal residues 2-57 for inhibition of *map1Δ* growth under the GAL1 promoter.

**Figure 5**

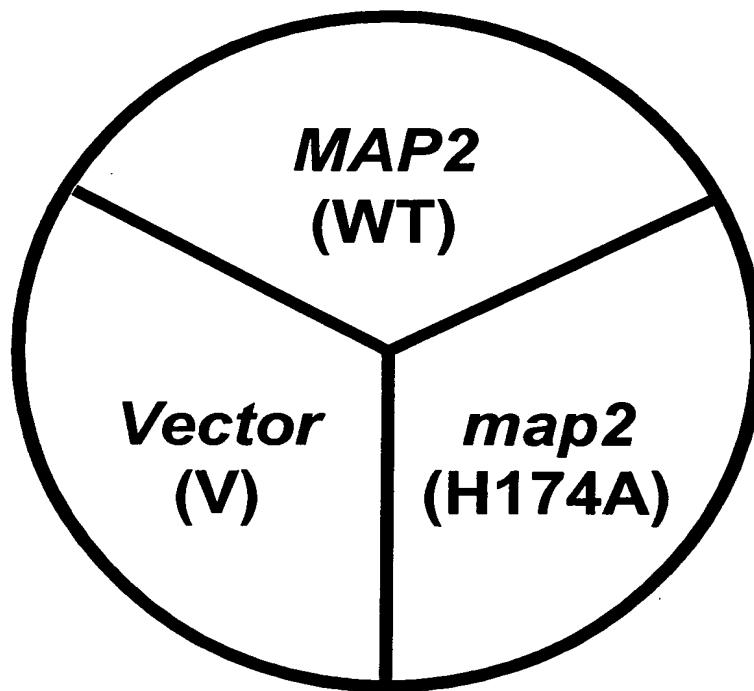
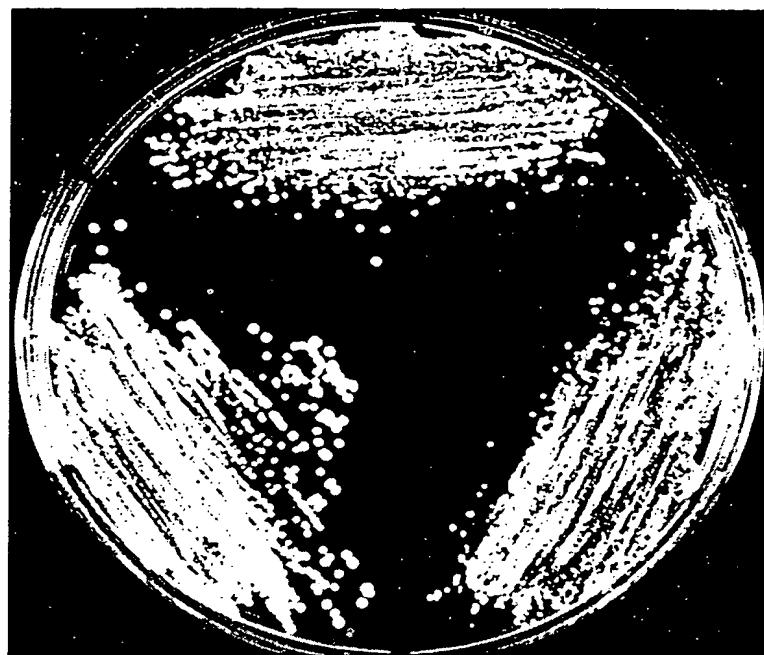
Title: Dominant Negative Variants of Methionine Aminopeptidase 2  
Inventor(s): Chang et al.  
Appln. No. 10/712,359  
Docket # 66153/45004



The steady state levels of each MetAP2 construct are comparable. Immunoblot comparison of HA-MetAP2 wt, HA-MetAP2 H174A, and MetAP2  $\Delta$ 2-57 H174A steady state levels in map1 $\Delta$ .

Figure 6

Title: Dominant Negative Variants of Methionine Aminopeptidase 2  
 Inventor(s): Chang et al.  
 Appln. No. 10/712,359  
 Docket # 66153/45004



Overexpression of H174A-MetAP2 under the GPD promoter does not inhibit the growth of map2Δ

Figure 7

Title: Dominant Negative Variants of Methionine Aminopeptidase 2  
Inventor(s): Chang et al.  
Appln. No. 10/712,359  
Docket # 66153/45004

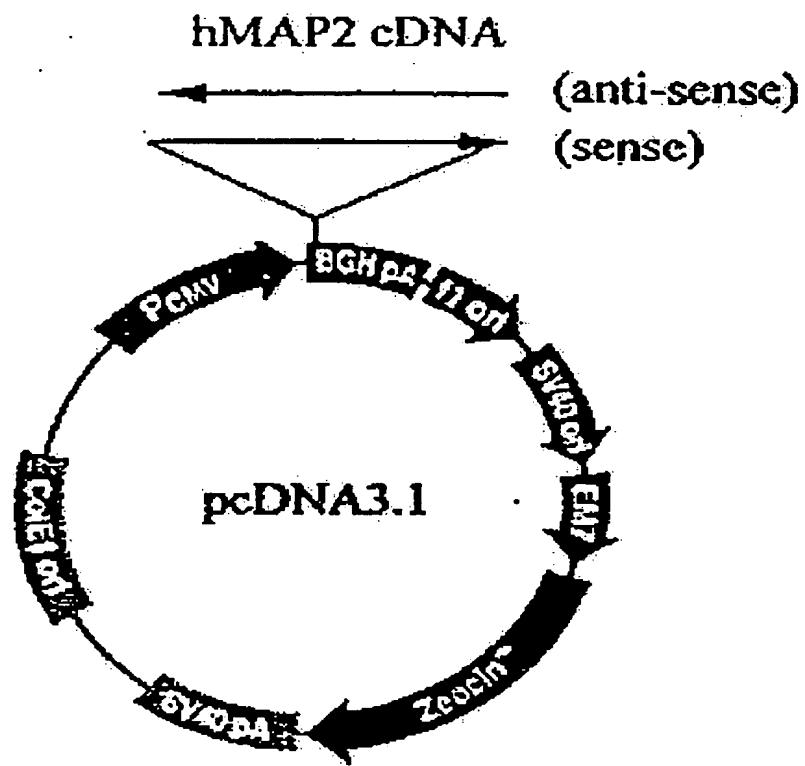
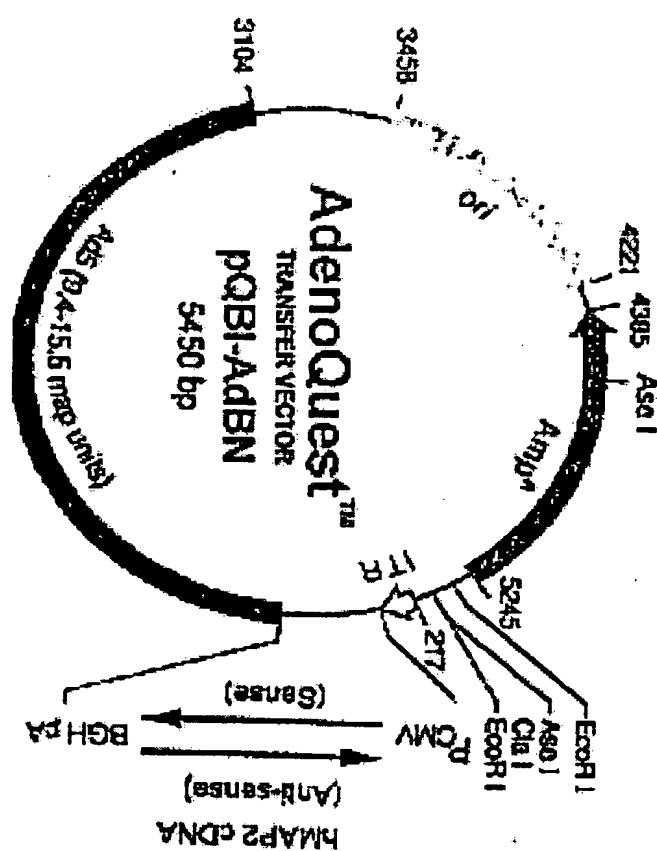


Figure 8

Title: Dominant Negative Variants of Methionine Aminopeptidase 2  
 Inventor(s): Chang et al.  
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 Docket # 66153/45004

Figure 9



Title: Dominant Negative Variants of Methionine  
Aminopeptidase 2  
Inventor(s): Chang et al.  
Appln. No. 10/712,359  
Docket # 66153/45004

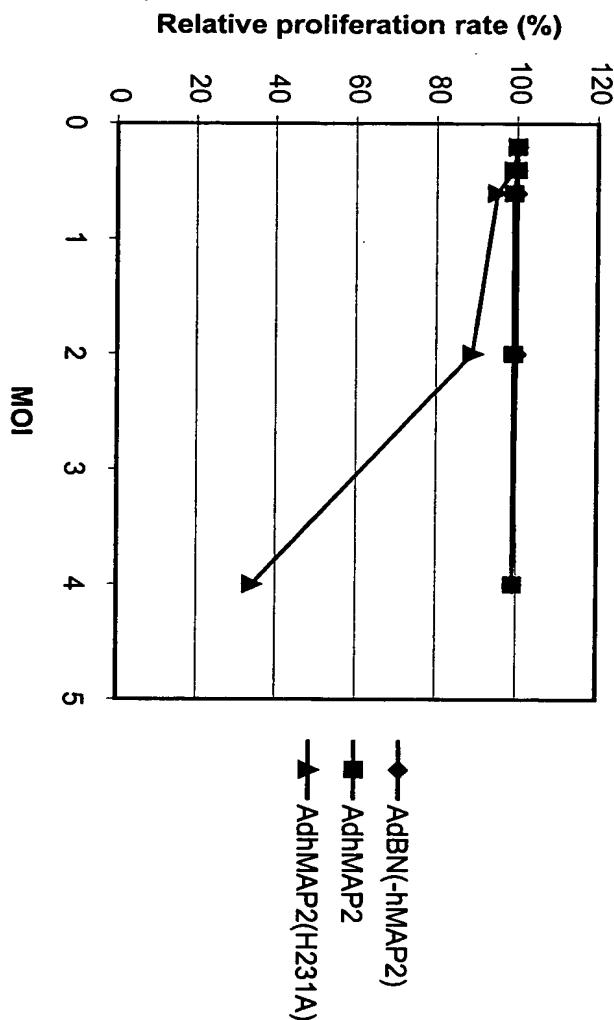


Figure 10

Title: Dominant Negative Variants of Methionine Aminopeptidase 2  
Inventor(s): Chang et al.  
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Docket # 66153/45004

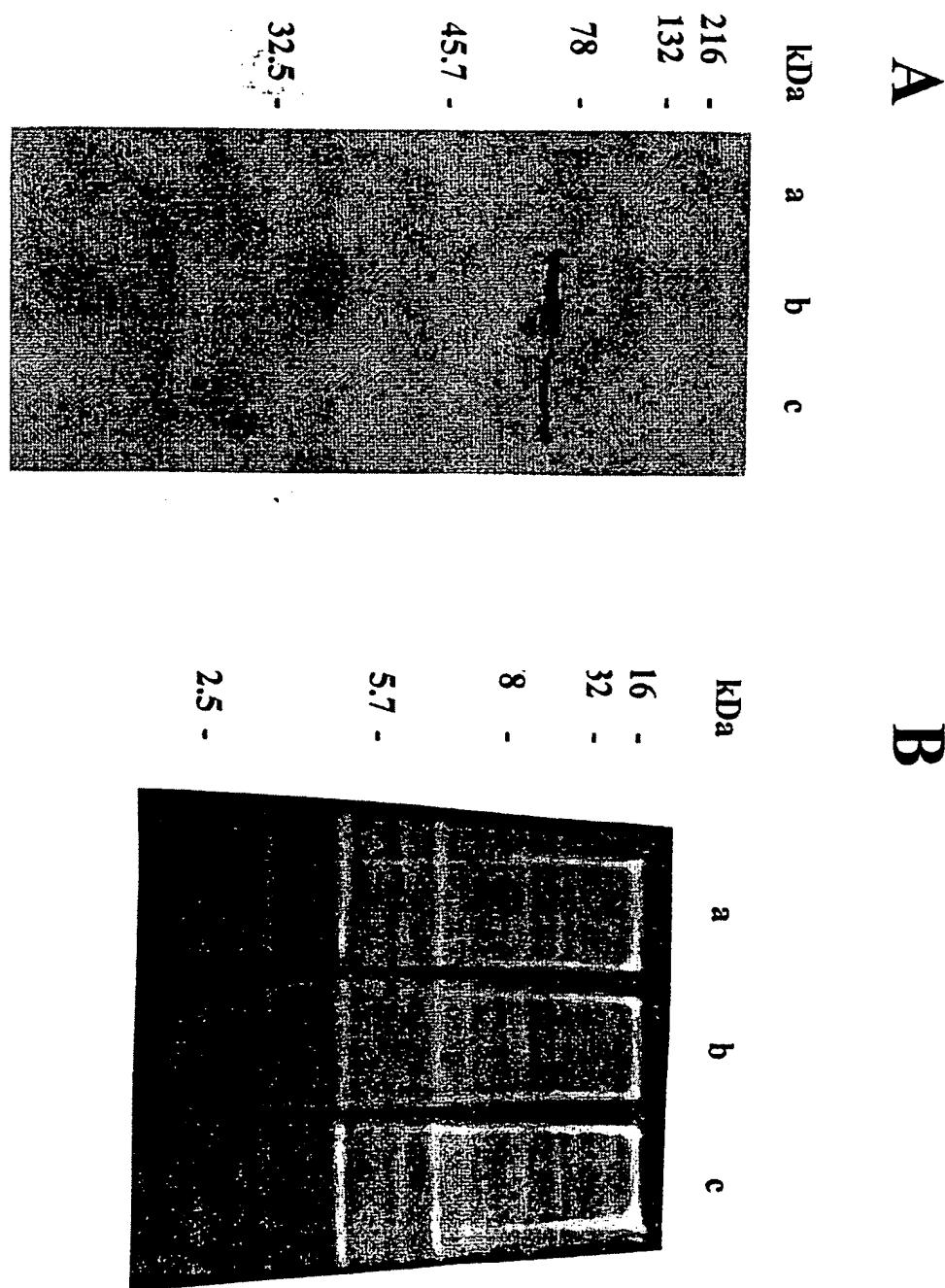


Figure 11

Title: Dominant Negative Variants of Methionine  
 Aminopeptidase 2  
 Inventor(s): Chang et al.  
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 Docket # 66153/45004